

## **Using Bipartite Networks to Construct Personal Recommendation Systems**

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Data mining is an area of computer science that has a broad range of practical applications. Data mining can be described as a process of discovering regularity in a larger set of data. In this paper we shall use a bipartite graph to model the relationship between customers and products, and construct a personal recommendation system. Our system has two adjustable parameters that can be used to manage two common shortfalls of recommendation systems, cold-start and sparse data.

Keywords: binary graph, data mining, personal recommendation systems